

What is claimed is:

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A1  
1 1. A system for wirelessly collecting vehicle data and for using collected vehicle data to  
2 determine vehicle service recommendations or vehicle replacement part  
3 recommendations, said system comprising:

4  
5 an in-vehicle device interconnected with a vehicle; and

6  
7 a communication interface device for data communicating wirelessly with said in-  
8 vehicle device, said communication interface device having a data communication  
9 connection with a data processing resource, said communication interface device  
10 is an internet appliance;

11  
12 wherein said in-vehicle device by way of said communication interface device data  
13 communicates with said data processing resource.

14  
1 2. The system in accordance with claim 1, wherein said data processing resource is a  
2 global network data processing resource.

3  
1 3. The system in accordance with claim 1, wherein said in-vehicle device further  
2 comprises:

3  
4 a vehicle monitor and metering interface for measuring and monitoring said  
5 vehicle telemetry data.

6  
1 4. The system in accordance with claim 3, wherein said vehicle monitor and metering  
2 interface further comprises at least one of the following:

3

4 an accelerometer for measuring or monitoring said vehicle acceleration changes;

5 a tachometer for measuring or monitoring said vehicle velocity; or

6 an odometer for measuring or monitoring said vehicle travel distance.

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1 5. The system in accordance with claim 1, wherein said in-vehicle device further  
2 comprises:

3  
4 a vehicle radio interface for interconnecting said in-vehicle device to said vehicle  
5 radio.

6  
1 6. The system in accordance with claim 5, wherein said vehicle radio by way of said  
2 vehicle radio interface data communicates with global network based data processing  
3 resources.

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1 7. The system in accordance with claim 5, wherein said vehicle radio by way of said  
2 vehicle radio interface receives data communication from a satellite.

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2 8. The system in accordance with claim 1, wherein said in-vehicle device further  
3 comprises:

4  
5 an alarm system interface for monitoring said vehicle security status.

6  
1 9. The system in accordance with claim 1, wherein said in-vehicle device further  
2 comprises:

3  
4 a personal data assistant interface for data communicating between said in-vehicle  
5 device and a personal data assistant device.

6  
1 10. The system in accordance with claim 9, wherein said personal data assistant interface  
2 supports at least one of the following protocols and or standards: WIRELESS  
3 APPLICATION PROTOCOL, BLUE TOOTH, WCDMA, GSM, CDMA, CDPD,  
4 TDMA, 2G type compliant, 3G type compliant, spread spectrum, a single frequency  
5 transceiver, a dual frequency transceiver, INTEL PRO/WIRELESS 5000 LAN, IEEE  
6 802.11, IEEE 802.11A, or IEEE 802.11B.

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1 11. The system in accordance with claim 1, wherein said in-vehicle device further  
2 comprises:  
3  
4 a user interface including a display, and a microphone for enabling a user to issue  
5 voice commands to said in-vehicle device.  
6

1 12. The system in accordance with claim 11, wherein said in-vehicle device is located  
2 external to said vehicle passenger compartment area and said user interface is electrically  
3 tethered to said in-vehicle device, such that said user can interact with said user interface  
4 from within said vehicle passenger compartment area.  
5

1 13. The system in accordance with claim 1, wherein said in-vehicle device further  
2 comprises:  
3  
4 a global positioning receiver interface for determining the geographic location of  
5 said in-vehicle device.  
6

1 14. The system in accordance with claim 1, wherein said in-vehicle device is retrofitted  
2 into said vehicle.  
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2 15. The system in accordance with claim 1, wherein said in-vehicle device further  
3 comprises a wireless transceiver.

4  
1 16. The system in accordance with claim 15 wherein, said wireless transceiver is at least  
2 one of the following: a wireless modem, a wireless phone, a cellular phone, a CDPD  
3 device, a CDMA device, a WCDMA device, a GSM device, a TDMA device, 2G type  
4 compliant device, a 3G type compliant device, INTEL PRO/WIRELESS 5000 LAN  
5 adapter device, IEEE 802.11 device, IEEE 802.11A device, IEEE 802.11B device, a  
6 spread spectrum transceiver, a single frequency transceiver, a dual frequency transceiver,  
7 a programmable storage device, a personal data assistant, a pager, pocket PC.

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1 17. The system in accordance with claim 16 wherein, said programmable storage device  
2 is at least one of the following: pocket PC, personal data assistant, a wireless phone, a  
3 pager, an RFID device, smart card, magnetic card, a key fob, a key chain, or a vehicle  
4 key.

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1 18. The system in accordance with claim 1, wherein wireless data communication  
2 between said in-vehicle device and said communication interface device utilizes at least  
3 one of the following communication protocols and or standards: WIRELESS  
4 APPLICATION PROTOCOL, BLUE TOOTH, WCDMA, GSM, TDMA, CDMA,  
5 CDPD, 2G type compliant, 3G type compliant, a single frequency transceiver, a dual  
6 frequency transceiver, INTEL PRO/WIRELESS 5000 LAN, IEEE 802.11, IEEE  
7 802.11A, or IEEE 802.11B.

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1 19. A system for wirelessly collecting vehicle data and for using collected vehicle data to  
2 determine vehicle service recommendations and or vehicle replacement part  
3 recommendations, said system comprising:

4  
5 an in-vehicle device interconnected with a vehicle; and

6  
7 a communication interface device for data communicating wirelessly with said in-  
8 vehicle device, said communication interface device having a data communication  
9 connection with a data processing resource;

10  
11 said in-vehicle device further comprises at least one of the following:

12  
13 a vehicle monitor and metering interface for measuring and monitoring  
14 said vehicle telemetry data;

15  
16 a vehicle radio interface for interconnecting said in-vehicle device to said  
17 vehicle radio;

18  
19 an alarm system interface for monitoring said vehicle security status;

20  
21 a personal data assistant interface for data communicating between said in-  
22 vehicle device and a personal data assistant device;

23  
24 a user interface including a display, and a microphone for enabling a user  
25 to issue voice commands to said in-vehicle device; or

26  
27 a global positioning receiver interface for determining the geographic  
28 location of said in-vehicle device;

29  
30 wherein said in-vehicle device by way of said communication interface device data  
31 communicates with said data processing resource.  
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2 20. A method of vehicle servicing by utilizing wirelessly communicated vehicle data to  
3 determine vehicle service recommendations, or vehicle part recommendations, said  
4 method of vehicle servicing comprising the steps of:

5  
6 a) receiving a plurality of data from an in-vehicle device, wherein said in-vehicle  
7 device is interconnected with a vehicle;

8  
9 b) accessing a plurality of data to obtain information related to said vehicle;

10  
11 c) determining a plurality of vehicle service recommendations, or a plurality of  
12 vehicle replacement part recommendations; and

13  
14 d) allowing a user, from said vehicle, to review and select at least one of said  
15 plurality of vehicle service recommendations, or at least one of said plurality of  
16 vehicle replacement part recommendations;

17  
1 21. The method of vehicle servicing in accordance with claim 20 further comprising the  
2 steps of:

3  
4 a) effectuating an e-commerce or an e-business transaction to place an order for  
5 said user selected said plurality of vehicle service recommendations, or to place  
6 an order for said user selected said plurality of vehicle replacement part  
7 recommendations; and

8  
9 b) confirming said e-commerce, or said e-business order placement.

10  
1 22. The method of vehicle servicing in accordance with claim 21, wherein the step of  
2 confirming said e-commerce, or said e-business order further comprises the step of:  
3

4 a) charging a plurality of fees for transacting said e-commerce, or said e-  
5 business transaction.

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1 23. A method of vehicle servicing including determining vehicle service  
2 recommendations, or determining vehicle replacement part recommendations, said  
3 method of vehicle servicing comprising the steps of:

4  
5 a) monitoring a plurality of vehicle data associated with a vehicle, said plurality of  
6 vehicle data being data communicated wirelessly between an in-vehicle device  
7 located in said vehicle and a communication interface device;

8  
9 b) analyzing said plurality of vehicle data;

10  
11 c) accessing a plurality of data to obtain information related to determining a  
12 plurality of vehicle service recommendations, or a plurality of vehicle  
13 replacement part recommendations;

14  
15 d) determining said plurality of vehicle service recommendations, or said plurality  
16 of vehicle replacement part recommendations;

17  
18 e) presenting analysis to at least one of the following: a mechanic, a customer, a  
19 user, a manufacture, a service center, an auto part merchant, an appropriate  
20 plurality of agents, or an appropriate plurality of agencies; and

21  
22 f) allowing said user, from said vehicle, to review and select at least one of said  
23 plurality of vehicle service recommendations, or select at least one of said  
24 plurality of vehicle replacement part recommendations.  
25

26 24. The method of vehicle servicing in accordance with claim 23 further comprising the  
27 steps of:

28  
29 a) effectuating an e-commerce or an e-business transaction to place an order for  
30 said user selected said plurality of vehicle service recommendations, or place an  
31 order for said user selected said plurality of vehicle replacement part  
32 recommendations; and

33  
34 b) confirming said e-commerce, or said e-business order placement.

35  
1 25. The method of vehicle servicing in accordance with claim 24, wherein the step of  
2 confirming said e-commerce, or said e-business order placement further comprises the  
3 step of:

4  
5 a) charging a plurality of fees for transacting said e-commerce, or said e-business  
6 transaction.

7  
1 26. A method of performing remote vehicle diagnostics comprising the steps of:

2  
3 a) receiving at a communication interface device a plurality of data, said plurality  
4 of data being data communicated by an in-vehicle device located in a vehicle, or  
5 data communicated by a programmable storage device carried by a user;

6  
7 b) communicating said plurality of data from said communication interface device  
8 to a remote location by way of a global network;

9  
10 c) analyzing said plurality of data at said remote location;

11



12 d) accessing a plurality of data processing resources to obtain information related  
13 to determining a plurality of vehicle service recommendations, and or determining  
14 a plurality of vehicle replacement part recommendations;

15  
16 e) determining said plurality of vehicle service recommendations, and or said  
17 plurality of vehicle replacement part recommendations; and

18  
19 f) allowing said user, from said vehicle, to review and or select at least one of said  
20 plurality of vehicle service recommendations, and or to review and or select at  
21 least one of said plurality of vehicle replacement part recommendations.

22  
23 27. The method of performing remote vehicle diagnostics in accordance with claim 26  
24 further comprising the steps of:

25  
26 a) effectuating an e-commerce or an e-business transaction by placing an order for  
27 said user selected said plurality of vehicle service recommendations, or by placing  
28 an order for said user selected said plurality of vehicle replacement part  
29 recommendations; and

30  
31 b) confirming said e-commerce, or said e-business order placement.

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1 28. The method of performing remote vehicle diagnostics in accordance with claim 27,  
2 wherein the step of confirming said e-commerce or said e-business order further  
3 comprises the step of:

4  
5 charging a plurality of fees for transacting said e-commerce, and or said e-  
6 business transaction.

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29. The method of performing remote vehicle diagnostics in accordance with claim 26 wherein, said programmable storage device is at least one of the following: pocket PC, personal data assistant, a wireless phone, a pager, an RFID device, smart card, magnetic card, a key fob, a key chain, or vehicle key.

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